

# RATHDRUM PRAIRIE GROUND WATER ADVISORY COMMITTEE

May 4, 2004

Dear Director Dreher:


The Rathdrum Prairie Ground Water Advisory Committee is pleased to submit to you the enclosed **Recommended Ground Water Management Plan**. This plan is the result of our work over the last year. This plan addresses the issues you asked us to consider in your order establishing the Rathdrum Prairie Ground Water Management Area. Additional actions that we believe need to be taken for successful long-term management of the Rathdrum Prairie are also included in the plan.

Throughout the development of the recommended plan, we followed the progress of the development and implementation of the Spokane Valley-Rathdrum Prairie Hydrologic Project, the coordinated bi-state study with the state of Washington and the United States Geological Survey. The completion of the project is a key component of our plan. A thorough understanding of the hydrology is of primary importance if the ground water resources are to be effectively managed. We incorporated flexibility into the plan so that information learned from the project can be included in the management strategies.

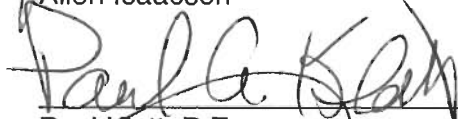
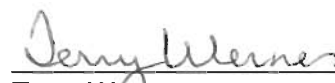
As we submit this plan, the Natural Resources Interim Legislative Committee is beginning the task of evaluating water management across Idaho. We are hopeful that the enclosed plan will help identify actions that need to be accomplished on the Rathdrum Prairie Aquifer. We hope the plan indicates where human and fiscal resources are needed.

We look forward to working with you and the committee to support the department's implementation of the plan. We would be happy to meet with you to discuss the plan.

Sincerely,

  
Chris Beck, P.E.  
Jim Markley, P.E.  
Allen Isaacson

Brian Orr

  
Paul Klatt, P.E.  
Terry Werner  
Pat Leffel

Rand Wichman

  
A. Dale Marcy

RECOMMENDED  
RATHDRUM PRAIRIE GROUND WATER MANAGEMENT AREA  
GROUND WATER MANAGEMENT PLAN

## **I. INTRODUCTION**

On December 11, 2002, the Director, Idaho Department of Water Resources (IDWR), designated the Rathdrum Prairie Ground Water Management Area ("RPGWMA"). The area was established to protect the ground water resources and users of the Rathdrum Prairie-Spokane Valley Aquifer within the state of Idaho. In Idaho, the aquifer is located in parts of Kootenai and Bonner counties and lies under more than 200 square miles of land.

Ground water resources in the aquifer supply much of the drinking water, irrigation, recreation, commercial, and industrial needs of the Rathdrum Prairie area. Careful management of the ground water supply is essential for the long-term economic vitality of the local and regional community.

A key component of the Director's Order is the development of a Ground Water Management Plan ("Plan") that balances the goals of protecting existing water users and maximizing the public benefit of the ground water resource. The Plan strives to create the tools to administer ground water resources now and in the future. The Plan attempts to balance protection of existing uses and the quality of the ground water resource while allowing for future development and encouraging water conservation.

## **II. PURPOSE AND AUTHORITY**

The Plan governs administration of ground water resources within the boundaries of the RPGWMA pursuant to Idaho Code.

The Plan implements the Order issued by the Administrator, IDWR, on December 11, 2002, which created the RPGWMA. The Plan includes recommendations of the Advisory Committee created by that Order. A copy of the Order is included as Attachment A.

## **III. GOALS**

The goals of the Plan are:

1. To obtain adequate technical data and quantification of **water availability** to make knowledgeable and appropriate management decisions about the ground water resources of the Rathdrum Prairie;

2. To obtain adequate technical data and quantification of **water use** to make knowledgeable and appropriate management decisions about the ground water resources of the Rathdrum Prairie;
3. To manage the ground water resource efficiently and fairly for all users of the resource;
4. To encourage water purveyors, regulatory agencies, and local & regional governments to plan for future water needs and incorporate the principles of this Plan in programs and policies & ordinances;
5. To encourage water conservation efforts for all users of the resource; and,
6. To encourage the state of Washington to obtain similar information to manage the resource consistently across the bi-state aquifer.

#### **IV. WATER MANAGEMENT STRATEGIES**

To accomplish the goals, the following strategies are recommended:

##### **Goal 1**

To obtain adequate technical data and quantification of **water availability** to make knowledgeable and appropriate management decisions about the ground water resources of the Rathdrum Prairie.

##### **Strategies**

A) IDWR will support and participate in the ongoing bi-state hydrogeologic study for the entire Rathdrum Prairie-Spokane Valley Aquifer. That study will include collection and analyses of data to understand the sustainable yield of the aquifer. This knowledge will be applied to modeling and other techniques for future management of the aquifer.

B) IDWR will modify management of the aquifer as additional information becomes available. Modifications to aquifer management may include changing the boundary of the RPGWMA, imposing special conditions on new and future water right permits, and other modifications as deemed appropriate and consistent with the goals of the Plan.

C) IDWR will develop an appropriate system to obtain the following information during well drilling and development of specific wells identified by IDWR in strategic locations:

- a. Depth to water;
- b. GPS coordinates of well locations;
- c. Detailed lithology;
- d. Depth to bedrock;
- e. Pump tests;
- f. Water quality sampling;

## **Goal 2**

To obtain adequate technical data and quantification of **water use** to make knowledgeable and appropriate management decisions about the ground water resources of the Rathdrum Prairie.

### **Strategies**

A) Collection of data for management of ground water use will be a multi-step process, leading to final administration. The steps, to be implemented as promptly as practicable are:

Step 1. Establish a Water Measurement District: As an interim measure, IDWR will establish a Water Measurement District as defined by Title 42, Chapter 7, Idaho Code until a water district as defined by Title 42, Chapter 6, Idaho Code can be established. A water measurement district will provide needed information about water use on the Rathdrum Prairie. Measurement and reporting to IDWR will assist in compiling water use information for developing a water budget as a part of the bi-state hydrologic study. Monitoring and reporting will be initiated for all consumptive water uses as follows:

For new uses 0.2 cubic feet per second (cfs) or less must have a functional metering device and report the total withdrawal once per year and agree to a simple list of conservation measures at the time of licensing;

For existing and new uses 0.21 cfs to 1.0 cfs is the same as above plus quarterly monitoring of water depth and quarterly reporting; and,

For existing and new uses 1.0 cfs or greater is the same as above except water production meters and water depth must be read monthly and reported quarterly. A conservation plan must be written and reviewed annually for achieving the goals and changes.

Step 2. Adjudication of Water Rights: Since resolution of aquifer issues is of vital importance to both Idaho and Washington, general adjudication of all existing water rights should be completed. While adjudication funding may not be immediately available, the highest priority should be assigned to completing this adjudication. An adjudication will completely define water rights in the basin. If the basin is subdivided for accomplishing a general adjudication, the lands overlying the Rathdrum Prairie Aquifer must be adjudicated first to maintain economic viability of this valuable region.

Step 3. Water District: Once the adjudication is completed, the water measurement district will be dissolved and a water district will be created in its place. The water district, with an elected watermaster and IDWR oversight, will provide administration of water rights and provide water users protection against illegal use or overuse of rights. As a minimum, the monitoring and reporting program established in Step 1 should be continued by the water district.

**Goal 3**

To manage the ground water resource efficiently and fairly for all users of the resource.

**Strategies**

A) Water administration under the direction of a water district will provide distribution of water in accordance with the schedule of rights and protect all water users from misuse or overuse.

B) IDWR shall evaluate transfers of water rights to ensure that the lands that the water rights originally benefited continue to receive an adequate water supply.

**Goal 4**

To encourage water purveyors, regulatory agencies, and local & regional governments to plan for future water needs and incorporate the principles of this Plan in programs and policies & ordinances.

**Strategies**

There are some water issues that are beyond the authority of the IDWR. These issues include, but are not limited to, local and regional planning and zoning, local and regional water conservation programs, and interstate water management:

A) Long term planning for municipal and community needs should use the planning tools available to them for planning and protecting for their future water needs. The privileges accorded municipal water purveyors by Idaho Law should be investigated for use by all local and regional bodies that qualify for that status.

B) IDWR encourages local jurisdictions to require connections to community systems when available in lieu of individual wells.

C) While protecting the sovereign rights of the state of Idaho, IDWR supports the concept of regional water management for the Rathdrum Prairie-Spokane Valley Aquifer. The aquifer is a regional resource that requires cooperation for comprehensive management and long-term viability.

**Goal 5**

To encourage water conservation efforts for all users of the resource.

## **Strategies**

A) For all new water rights or changes to existing water rights, IDWR will require conservation plans from all municipal purveyors regulated as public water systems and other ground water right holders diverting more than 0.20 cfs. IDWR will enforce adherence to the conservation plan provisions through permit conditions or civil penalties as allowed by law. IDWR will develop a schedule of elements to be included based on system size. Each plan may include the following elements as described in guidelines published by EPA ("Water Conservation Plan Guidelines", Environmental Protection Agency, 1998):

- specify conservation planning goals
- develop a water system profile
- describe planned facilities
- identify water conservation measures
- analyze benefits and costs
- select conservation measures
- integrate resources and modify forecasts
- present implementation and evaluation strategy

B) IDWR encourages economic support for water purveyors to develop conservation plans through access to federal and state programs such as the Drinking Water State Revolving Fund (SRF).

C) IDWR encourages the establishment of an aquifer-wide water conservation advisory committee representing municipal purveyors for purposes of water conservation planning, education, and implementation.

D) IDWR promotes landscaping efficiency demonstration projects and encourages funding support through state and federal sources.

E) IDWR supports price structures for water that encourage conservation of water resources.

F) IDWR supports the development of water conservation educational activities by municipal purveyors regulated as public water systems.

G) Existing or planned consumptive uses of ground water on the Rathdrum Prairie should substitute reclaimed wastewater where ever it is readily available and meets water quality requirements. IDWR supports the investigation of using reclaimed wastewater from municipal wastewater facilities to lessen the impact of the wastewater on the Spokane River.

## **Goal 6**

To encourage the state of Washington to obtain information regarding water availability and use to manage the resource consistently across the bi-state aquifer.

## **Strategies**

As discussed in Strategies for Goals 1 and 2, long-term management of the ground water resources will require regional cooperation with the state of Washington. Therefore, IDWR encourages the state of Washington to develop and implement similar water management strategies to this plan.

## **V. ACTIONS**

Additional IDWR actions to be implemented immediately upon adoption of a management plan are necessary to administer the ground water resources adequately. These actions include:

1. New domestic uses defined by Section 42-111, Idaho Code, may be authorized based on IDWR approval of a well drilling application/permit. New individual ground water domestic uses shall be discouraged if water can be reasonably supplied from a municipal source.
2. Ground water rights with diversion points located within the management area shall not be considered lost, abandoned and/or forfeited for non-use, in whole or in part, if non-use is for the purpose of conservation or other conditions of this management plan and with approval of the Director, IDWR. The five (5) year period of non-use for forfeiture of a water right shall resume upon termination of this Plan unless non-use is otherwise authorized by law or such conditions set forth in Idaho Code.
3. Any well to be abandoned in the management area shall require a well abandonment approval issued by IDWR. This requirement will protect water quality and limit wasting of water that might otherwise result from improper well abandonment techniques. Before any well is abandoned, the possibility that it could be used for monitoring should be explored.
4. The Director may require aquifer monitoring for any new ground water diversions approved around the GWMA to the extent that such monitoring would be expected to yield data relevant to the boundaries and conditions of the management area.
5. IDWR supports the investigation of managed recharge of the RPSV aquifer. During periods of high flow in the Spokane River, the potential exists for enhancing the volume of water that enters the aquifer along the losing reaches of the river. The stored water could then be available for discharge to the river during the traditional low-flow time period. The investigations must evaluate the economics of augmented volumes while preserving the water quality of the aquifer.

## **VI. ADVISORY COMMITTEE**

A) The Advisory Committee recommends that the Director hold a public meeting in the local area prior to approval of the Plan.

B) The Advisory Committee shall continue to perform the duties described in the Order including recommending solutions to issues that arise in the RPGWMA.